



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D130-1048-013
Job Sheet 196758



Part No: D130-1048-013

Job Qty: 1 pcs

Part Name: H130/EC130 - Skidtube - Standard w/ Full-Length Wearplates - LH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/20/19

Job Tracking No:

Due Date: 7/12/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG D130-1048-013 REV.A/ IIN-D130-1048 REV.C IPP REV:A 19.06.20 NEW ISSUE DD VERF:JFS

Ship Via:

Master Unit
No 010963

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
110	Handfinish - 4 - Assembly	1 pcs	7/12/19	7/12/19	0.00	0.50	Handfinish - 4 - 1		19-7-12
							Handfinish - 4 - 10		
							Handfinish - 4 - 11		
							Handfinish - 4 - 12		
							Handfinish - 4 - 13		
							Handfinish - 4 - 14		
							Handfinish - 4 - 15		
							Handfinish - 4 - 2		
							Handfinish - 4 - 3		
							Handfinish - 4 - 4		
							Handfinish - 4 - 5		
							Handfinish - 4 - 6		
							Handfinish - 4 - 7		
							Handfinish - 4 - 8		
							Handfinish - 4 - 9		
120	QC 5	1 pcs	7/12/19	7/12/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		



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Container No: S198682



Part: D130-1048-013

Job No: 196758

Serial No/Batch: S198682

Revision: A/C

Inspector:

Exp Date:

Instructions: TC STC SH19-4 Issue 1, FAA STC SR04320N

		QC 5 - 40		JUL 17 2019	
130 Packaging 1-1 - Pick Kit - B4B 1 pcs	7/12/19	0.00 0.00	Packaging 1 - 1 - B4B		
			Packaging 1 - 2 - B4B		
			Packaging 1 - 3 - B4B	0.2	Wed 7-17-2019
			Packaging 1 - 4 - B4B		
			Packaging 1 - 5 - B4B		
			Packaging 1 - 6 - B4B		
			Packaging 1 - 7 - B4B		
			Packaging 1 - 8 - B4B		
			Packaging 1 - 9 - B4B		
			Packaging 1 - 10 - B4B		
			Packaging 1 - 11 - B4B		
			Packaging 1 - 12 - B4B		
			Packaging 1 - 13 - B4B		
			Packaging 1 - 14 - B4B		
			Packaging 1 - 15 - B4B		
			Packaging 1 - 16 - B4B		
			Packaging 1 - 17 - B4B		
			Packaging 1 - 18 - B4B		
			Packaging 1 - 19 - B4B		
			Packaging 1 - 20 - B4B		
			Packaging 1 - 21 - B4B		
			Packaging 1 - 22 - B4B		
			Packaging 1 - 23 - B4B		
			Packaging 1 - 24 - B4B		
			Packaging 1 - 25 - B4B		
			Packaging 1 - 26 - B4B		
			Packaging 1 - 27 - B4B		
			Packaging 1 - 28 - B4B		
			Packaging 1 - 29 - B4B		
			Packaging 1 - 30 - B4B		
			Packaging 1 - 31 - B4B		
			Packaging 1 - 32 - B4B		
			Packaging 1 - 33 - B4B		
			Packaging 1 - 34 - B4B		
			Packaging 1 - 35 - B4B		
			Packaging 1 - 36 - B4B		
135 QC 4 1 pcs	7/12/19	0.00 0.00	QC 4 - 28		
			QC 4 - 58		
			QC 4 - 69		
			QC 4 - 9		DAS 75 9-89
			QC 4 - 46		
			QC 4 - 68		
			QC 4 - 72		JUL 17 2019
			QC 4 - 74		
			QC 4 - 75		
140 Packaging 3-1 - Stock - B4B 1 pcs	7/12/19	0.00 0.00	Packaging 3 - 1 - B4B		
			Packaging 3 - 2 - B4B		
			Packaging 3 - 3 - B4B		DAS 75 9-89
			Packaging 3 - 4 - B4B		
			Packaging 3 - 5 - B4B		
			Packaging 3 - 6 - B4B		
			Packaging 3 - 7 - B4B		JUL 17 2019
			Packaging 3 - 8 - B4B		
			Packaging 3 - 9 - B4B		
			Packaging 3 - 10 - B4B		
			Packaging 3 - 11 - B4B		
			Packaging 3 - 12 - B4B		
			Packaging 3 - 13 - B4B		

					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
155	DC - 1 - B4B	1 pcs	7/12/19	0.00 0.00	DC - 1 - B4B	21
					DC - 2 - B4B	9-88
165	QC 21 - SA	1 pcs	7/12/19	0.00 0.00	QC 21 - SA - 21	21
					QC 21 - SA - 70	9-88
					QC 21 - SA - 53	
Part Op 110 - ASSEMBLE AS PER DWG SEE DWG NOTES 9) TORQUE BOLT TO 15 - 25 in-lbs 10) TORQUE NUT TO 44 - 62 Descriptions: in-lbs 11) TORQUE NUT TO 62 - 71 in-lbs 12) SEAL FAYING SURFACES WITH SIKAFLEX-241/-291 13) FILLET SEAL WITH SIKAFLEX-241/-291 14) PLUG SEAL SADDLE HOLES WITH SIKAFLEX-241/-291 SEALANT ENSURE SADDLE BORE IS FREE OF SEALANT 120 - QC5- Inspect part completeness to step on W/O 130 - Pick Kit - BAG AND ID HARDWARE. 135 - QC4- 100% Inspect kits for completeness 140 - Identify and pack for shipping as per PPP D130-1048-013 Location: _____ PPP Rev: _____ 155 - Document Control - Photocopy blue file and create labels as per PPP D130-1048-013 chg 001 165 - QC21- Final Inspection - Work Order Release						

Master Unit No: 010963

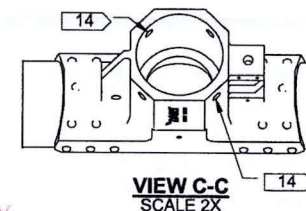
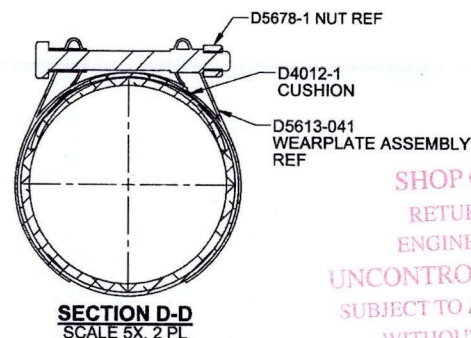
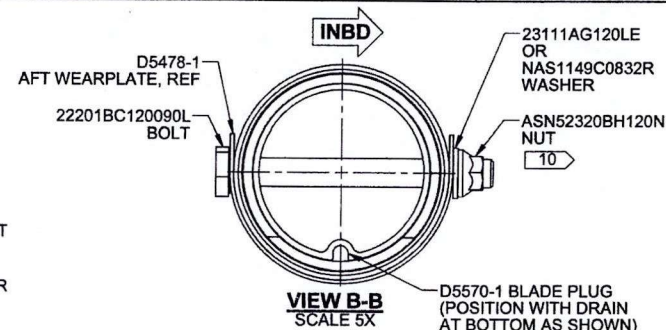
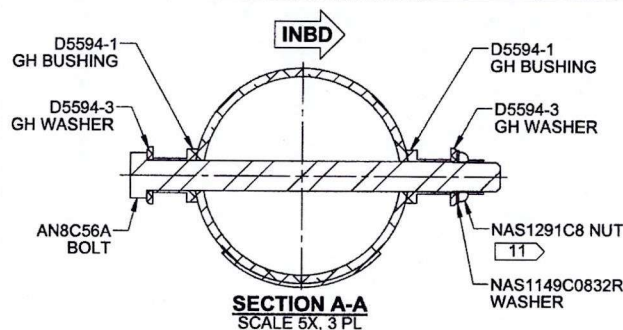
Job BOM					010915
Part / Item	Component Name	Quantity	Operation	Container	
22201BC120090L	Bolt	1 Ea (1 ea)	110-Handfinish - 4 - Assembly		5194791
23111AG120LE	Washer	1 Ea (1 ea)	110-Handfinish - 4 - Assembly		5101932
AN8C56A	Bolt	3 Ea (3 ea)	110-Handfinish - 4 - Assembly		519795J
ASN52320BH120N	Nut	1 Ea (1 ea)	110-Handfinish - 4 - Assembly		5105101
D130-1048-041	H130/EC130 - Replacement Skidtube - Standard - LH	1 pcs (1 ea)	110-Handfinish - 4 - Assembly		5196505
D130-1048-051	H130/EC130 - Wearplates - DART & OEM Replacement - Basic - LH	1 pcs (1 ea)	110-Handfinish - 4 - Assembly		5197959
D130-1048-053	H130/EC130 - Wearplates - DART & OEM Replacement - Midtube	1 pcs (1 ea)	110-Handfinish - 4 - Assembly		5198677
D5569-1	Replacement Blade - Stainless Steel	1 pcs (1 ea)	110-Handfinish - 4 - Assembly		5194971
D5570-1	Blade Plug	1 pcs (1 ea)	110-Handfinish - 4 - Assembly		5144972
D5594-1	GH Bushing	6 pcs (6 ea)	110-Handfinish - 4 - Assembly		5129352
D5594-3	GH Washer	6 pcs (6 ea)	110-Handfinish - 4 - Assembly		5104022
NAS1149C0832R	Washer (AN960C816L)	3 Ea (3 ea)	110-Handfinish - 4 - Assembly		50761712
NAS1291C8	Nut, Self-Locking	3 Ea (3 ea)	110-Handfinish - 4 - Assembly		122409
23111AG100LE	Washer	1 Ea (1 ea)	130-Packaging 1-1 - Pick Kit - B4B		5196062
ASNA0045BC100L	Nut, Castellated	1 Ea (1 ea)	130-Packaging 1-1 - Pick Kit - B4B		5109874
DHS411-101.3106	Metric Hex Head Aerospace Bolt	1 Ea (1 ea)	130-Packaging 1-1 - Pick Kit - B4B		5093539
MS21141S-06-05	Rivet	20 Ea (20 ea)	130-Packaging 1-1 - Pick Kit - B4B		5196061
MS24665-231	Cotter Pin	1 pcs (1 ea)	130-Packaging 1-1 - Pick Kit - B4B		F113815

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
110-Handfinish - 4 - Assembly	22201BC120090L	1	0	0
	23111AG120LE	1	40	0
	AN8C56A	3	18	0
	ASN52320BH120N	1	9	0
	D130-1048-041	1	0	0
	D130-1048-051	1	0	0
	D130-1048-053	1	0	0
	D5569-1	1	2	0
	D5570-1	1	4	0
	D5594-1	6	12	0
	D5594-3	6	15	0
	NAS1149C0832R	3	307	0
	NAS1291C8	3	32	0
	23111AG100LE	1	4	0
	ASNA0045BC100L	1	6	0
130-Packaging 1-1 - Pick Kit - B4B	DHS411-101.3106	1	4	0
	MS21141S-06-05	20	90	0
	MS24665-231	1	113	0

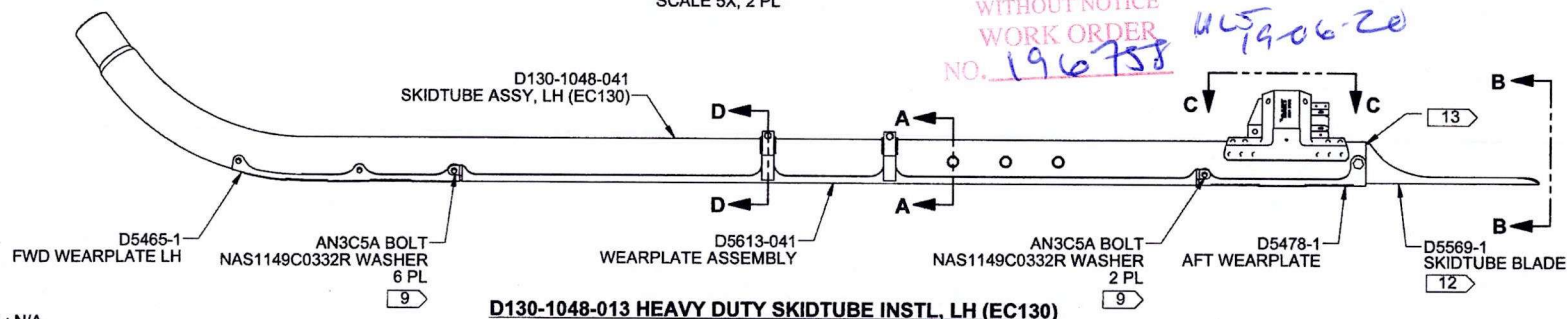
Part Specifications

Specifications could not be found.

QTY -013	P/N	DESCRIPTION
X	D130-1048-013	HEAVY DUTY SKIDTUBE INSTL, LH (EC130)
1	D130-1048-041	SKIDTUBE ASSY, LH (EC130)
2	D4012-1	CUSHION
1	D5465-1	FWD WEARPLATE LH
1	D5478-1	AFT WEARPLATE
1	D5569-1	SKIDTUBE BLADE
1	D5570-1	BLADE PLUG
6	D5594-1	GH BUSHING
6	D5594-3	GH WASHER
1	D5613-041	WEARPLATE ASSEMBLY
1	22201BC120090L	BOLT
1	23111AG120LE	WASHER (OR NAS1149C0832R)
8	AN3C5A	BOLT
3	AN8C56A	BOLT, MACHINE
1	ASN52320BH120N	NUT
8	NAS1149C0332R	WASHER
3	NAS1149C0832R	WASHER
3	NAS1291C8	NUT, SELF-LOCKING
1	23111AG100LE	WASHER (OR NAS1149C0732R)
1	ASNA0045BC100L	NUT, CATELLATED
1	DHS411-101.3106	BOLT
1	EN2367-18028	COTTER PIN (OR MS24665-231)
20	MS21141S0605	MAXIBOLT, BLIND, PAN HEAD



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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 196758



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 25.96 lbs
- 8) HARDWARE NOT SHOWN. TO BE SHIPPED LOOSE.
- 9) TORQUE BOLT TO 15 - 25 in-lbs
- 10) TORQUE NUT TO 44 - 62 in-lbs
- 11) TORQUE NUT TO 62 - 71 in-lbs
- 12) SEAL FAYING SURFACES WITH SIKAFLEX-241/-291
- 13) FILLET SEAL WITH SIKAFLEX-241/-291
- 14) PLUG SEAL SADDLE HOLES WITH SIKAFLEX-241/-291 OR PROSEAL 890 OR EQUIVALENT MIL-S-8802 SEALANT ENSURE SADDLE BORE IS FREE OF SEALANT

RELEASED

2019 JUN 19 NO
ECN 19-625

APPROVED

A NEW ISSUE		ZF	19.04.05
REV.	DESCRIPTION	BY	DATE
DESIGN	ZF		
DRAWN	ZF		
CHECKED	MW		
MFG. APPR.	JFS		
APPROVED	NO		
DE APPR.	CP		
DATE 19.04.05			

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D130-1048-013	REV. A
TITLE SKIDTUBE INSTL, LH (EC130)	SHEET 1 OF 1
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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

32.16 PARTS LISTS

32.16.1 D130-1048-011/-012/-013/-014 Skidtubes

QTY -011	QTY -012	QTY -013	QTY -014	QTY -051	QTY -052	QTY -053	P/N	DESCRIPTION
X							D130-1048-011	BASIC SKIDTUBE INSTALLATION, LH
	X						D130-1048-012	BASIC SKIDTUBE INSTALLATION, RH
		X					D130-1048-013	HEAVY DUTY SKIDTUBE INSTALLATION, LH
			X				D130-1048-014	HEAVY DUTY SKIDTUBE INSTALLATION, RH
1		1		X			D130-1048-051 (2)(3)	REPLACEMENT WEARPLATES, LH
	1		1		X		D130-1048-052 (2)(3)	REPLACEMENT WEARPLATES, RH
		1	1			X	D130-1048-053 (3)	MIDTUBE WEARPLATE KIT
1		1					D130-1048-041	SKIDTUBE ASSY, LH
	1		1				D130-1048-042	SKIDTUBE ASSY, RH
				1			D5465-1	FWD WEARPLATE, LH
					1		D5465-2	FWD WEARPLATE, RH
				1	1		D5478-1	AFT WEARPLATE
						1	D5613-041	MIDTUBE WEARPLATE
				8	8		AN3C5A	BOLT
				8	8		NAS1149C0332R	WASHER
						2	D5678-1 (4)	NUT
						2	D4012-1	CUSHION
		1	1				D5569-1 (3)	HEAVY DUTY SKIDTUBE BLADE
1	1						D5569-3 (2)	SKIDTUBE BLADE
1	1	1	1				D5570-1 (2)(3)	BLADE PLUG
1	1	1	1				22201BC120090L (1)(2)(3)	BOLT
1	1	1	1				23111AG120LE (1)(2)(3)	WASHER (or NAS1149C0832R)
1	1	1	1				ASN52320BH120N (1)(2)(3)	NUT
6	6	6	6				D5594-1 (2)(3)	GH BUSHING
6	6	6	6				D5594-3 (2)(3)	GH WASHER
3	3	3	3				AN8C56A (2)(3)	BOLT
3	3	3	3				NAS1149C0832R (2)(3)	WASHER
3	3	3	3				NAS1291C8 (2)(3)	NUT
1	1	1	1				DHS411-101.3106 (1)	BOLT
1	1	1	1				23111AG100LE (1)	WASHER (or NAS1149C0732R)
1	1	1	1				ASNA0045BC100L (1)	NUT, CASTELLATED
1	1	1	1				EN2367-18028 (1)	COTTER PIN (or MS24665-231)
20	20	20	20				MS21141S0605	MAXIBOLT, BLIND, PAN HEAD (or CR7621S06-05)

- (1) Airbus Helicopter Part Numbers (or alternative) included in kit
 (2) Pre-assembled on D130-1048-011/-012 Skidtube
 (3) Pre-assembled on D130-1048-013/-014 Skidtube
 (4) Pre-assembled on D5613-041 Midtube Wearplate